394 from him. Wicks are attached to nails in a wheellike frame and are then dipped repeatedly in liquid wax until the candles reach the desired thickness. The frame is suspended from the ceiling by a rope.

Paper flowers.—The women of one rather 532 large household make paper flowers for funerals and paper ornaments for weddings. It was impossible to establish satisfactory contacts to learn details.

Blacksmithing.—Cherán has one reputed 326 blacksmith. The individual concerned was never found at home, nor could any details concerning his techniques be learned.

Baking.—A baker of sweetened breads (*pan* 256 *dulces*) established himself in Cherán in 1943. 438 He baked daily in a regular local oven belonging to one of the wealthier storekeepers. The bread was sold with the aid of a boy, who carried it about town in a big basket hat such as is used in Mestizo towns in the neighborhood. Information on sales was refused, but probably they were between $10 and $12 a day at three breads for 5 centavos. Expenses each day were 1 *arroba* (25 pounds) of flour, $3.62; 1 kilo (2.2 pounds) of lard, $1.50; 3 kilos of sugar, $1.08; or a cash outlay of $6.20, plus the labor of baker and vendor. This does not take into account the firewood for heating the oven. Profits evidently at best hardly justify the secrecy shown.

Fireworks.—At least one man in Cherán 389 makes fireworks, both *cohetes* (explosive rockets) and *castillos* (set pieces built about a tall pole). The one man interviewed was born in Pichataro (which suggests he may be Mestizo in origin, although he apparently regards himself as a Tarascan) and learned the trade from his father.

Materials used in the manufacture of *cohetes* are niter, chlorate, sulfur, paper, agave fiber cord, and shakes. The worker interviewed makes *cohetes* only on order. He by no means supplies all the Cherán market.

Castillos likewise are made only on order. It is a general rule that *castillos* be bought outside the town, so the Cherán *cohetero* has never made a *castillo* for a Cherán fiesta. In 1940 he made *castillos* for San Felipe, Cheranástico, Ahuiran, and Pichataro.

Materials for *castillos* are necessarily quite

[p.446]

389 elaborate, as they require fuses of various speeds, different colors of fire, and slow-burning types of powder. As handbooks exist for this type of manufacture and supply houses also furnish information to their patrons, it was felt that detailed inquiry into techniques was not worth while. The *cohetero* usually receives a small advance payment—5 to 15 pesos—when he accepts an order. He receives no further payment until the *castillo* is burned. Should [686] there be a failure, not only may the *cohetero* fail to receive his pay, but he may be jailed and fined.

Stonecutting.—Several men do stonecutting 324 on a part-time basis. Doorsills and bases for door posts and pillars are the major products, although some men also make grinding stones for *nixtamal* mills. A fine-grained gray lava from the barranca north of town is the most-used material. Tools include an iron-headed hammer, weighing about 2 pounds, steel chisels, and a pair of calipers. Stones for the *nixtamal* mills are made in pairs and are about a foot in diameter and 6 to 8 inches thick. About 3 days are required to make a pair.

Tanning.—The only full-time tanner of hides 281 in Cherán is a native of Aranza, who moved to Cherán because of the better water supply. He has a house and lot on the east side of town beside the aqueduct. Most of his work is done on hides brought him by shoemakers and *guarache* makers. Such work is charged for on a fee basis.

A man and his uncle also tan hides on a part-time basis. They are primarily farmers and do relatively little of the tanning in Cherán.

Cowhides are tanned with oak bark. The process takes 20 to 30 days, mostly occupied with soaking the hides in the tanning mixture. Sheepskins, used for inner soles of shoes, must be put through a lye bath, scraped, and then soaked with oak bark. A batch of five or six sheepskins requires 2 days' labor and about 8 days' soaking.

The principal equipment consists of a number of large hollow logs for soaking the hides.

Lacquer.—One woman learned lacquer mak- 532 ing in Uruapan. She works fairly steadily, producing a typical Uruapan black-background lacquer with floral designs in four or five colors. She sells all her product in Cherán.

[text continues on page 46a]

253 433 434

15 *arrobas* (375 pounds)	$90
14 *arrobas* (350 pounds)	65
16 *arrobas* (400 pounds)	92
Retail price (per kilo)	.70
Gross profit on beef (per kilo)	.40–.45
Price of pigs	30.00 and up
Gross profit, per week	7.00–8.00
Gross profit, per pig	3.50–8.00

Comment: Returns to butchers are slight on the basis of meat sales. Generally the profit consists of: (a) Meat for the family at no cost, and (b) sale of the hide, usually for $10.00. Most butchers handle beef only, but one who specializes on pork, butchering one or two a week, claimed a profit of 7 or 8 pesos. An item unaccounted for in the figures for beef is a tax of [651] $5.00 on each animal killed. It is also widely believed that some butchers deal in stolen cattle at a considerable profit. Few butchers lack other sources of income, however, which argues against great profits. Butchering also varies in profitableness at various seasons; when cheese is abundant the demand for meat falls off, and the butcher may have to dry part of his meat and sell it at a lower price.

241 434

Field watchers:

Wages:	
In maize	1 row in 30
Average income for 6 weeks to 2 months (cash value of maize)	$60–$65

Comment: Field watchers (*veladores*) must be men of good reputation. Usually they watch 20 to 25 pieces of land. Although wages seem high—$1 a day or more—the work is seasonal and involves staying day and night in the fields.

312 434

Water carrying:

Charge for two 25-liter cans	$0.06

Comment: Only one man engages in this work regularly. He works fairly steadily, but no data were secured on his income. Presumably it is as good or better than he could earn as a laborer.

231 433 434

Beekeeping:

12 hives produced:	
15 liters of honey at $0.60	$ 9.00
3–4 kilos of wax at $2.25–$2.50	6.70–10.00
Wax:	
1 kilo makes 10–centavo candles worth	3.00– 3.25
3–4 kilos make 10–centavo candles worth	9.00–13.00
Potential income from 12 hives if owner makes candles	15.00–22.00

Comment: In all cases bees are kept as a profitable, but not extremely important, sideline to other activites.

389 433 434

Fireworks making:

Figures from the one fireworks maker in Cherán proved inconsistent upon analysis. The following facts seem reasonable.

389 Materials and prices:

	Per kilo
433 Nitrate	$1.70
Chlorate	5.00
434 Sulfur	.80
Fiber string	1.00
Shakes, cane, etc.	Nominal

(Shakes are $5 a bundle of 400, but the number used is small; 3 or 4 per dozen *cohetes*, for example.)

Comment: Cohetes are made to order and sell at $3.00 to $4.00 per dozen. *Castillos* or set pieces are done on contract. Gross income from this source was at least $400 in 1940. Between times *cohetes* were made fairly steadily. Probably the fireworks maker's income is above average.

DISTRIBUTION

439 The problem of distribution affects primarily those goods which are exported from Cherán and those things which are imported. Only a small fraction of the materials produced locally are sold locally; in the main each family produces the local products it consumes and sells its surplus for export.

The export goods of Cherán consist almost wholly of forest products and farm products. The first are usually sold on contract or are transported by the producer to market. Railroad ties, for example, are always cut on contract. Charcoal is mostly sold to dealers from Zacapu and is delivered to the nearest spot where it can be picked up by trucks. However, there is some small local sale, mostly for operation of producer gas generators for *nixtamal* mills, and a little is carried on burros to such a town as Uruapan. Similarly, planks and beams are mainly sold, either to dealers who pick them up in trucks for export or locally on contract to someone building a house. In towns close to Uruapan, Zamora, or other centers, much of the sale of such products as charcoal, planks, and beams is direct, the maker carrying the goods to town on market day.

The major exception to the marketing methods for forest products described above is tejamanil, or shakes. For the local market, the shake maker usually works on order. For the export market he usually takes his product on burros to some nearby Mestizo town. These expeditions may be combined with other trading operations. Thus, shakes may be taken to Turetan via Nahuatzen, Tingambato, and Ziracuaretiro, a full-day trip with burros from 5

527 624 Durán, *barrio* III, music; Marcelino Guerrero, *barrio* IV, wax. Each of these men had a number of assistants. Marcelino Guerrero, for example, had eight. This group first estimated their expenses at about $125 to cover the cost of candles and the Mass. As late as September 17 they were not sure how much the wax would cost, because they had not yet talked with the new priest to find out what he would think necessary. Ordinarily in the past about 14 kilos of wax had been used, made into candles weighing a half kilo each. Smaller candles are also provided. The large candles have decorations of white paper. Formerly the candles were taken to church in a procession with music, but now there is no ceremony.

In addition to estimating expenses, the commissioner and his assistants made up a list of all the men in the *barrio* and set a quota for each contribution, varying from $0.50 to $1.25 per person, according to their economic conditions. About September 17 the commissioners visited all the houses to inform people what the quotas were and to warn them to be ready to pay their contribution. The following Sunday they made their actual visits for contributions. In 1940 they had some difficulty, because maize was scarce at the time and numerous people were having to buy maize.

Mateo Ocampo, commissioner for the fireworks, and his group had made up their accounts by September 12. At that time estimates were that the main *castillo* would cost [389] $150 and would be 20 yards high. The individual contribution averaged $1.25. (On October 1, Ocampo was still collecting money.) The fireworks maker had been engaged from Paracho. In addition to collecting money, the commissioner and his assistants had to cut and bring the poles for the *castillos*. The commissioner also had to feed the fireworks maker and his assistant for about a week.

527 624 533 The commissioners for the music functioned similarly. Their task was more onerous, for the musicians are the most expensive of the obligations. Fernando Durán, for *barrio* II, had arranged for the band of Nahuatzen at a cost of $270 for 4 days, Sunday to Wednesday. In addition to this, the commissioners had to feed the musicians for this time. If any funds were collected more than the amount needed to

527 533 [534] Somewhat later, after the storm had subsided, the *chirimía* band arrived. Four or five players on an oboelike wooden instrument (with a double reed mouthpiece and a number of finger stops) played in unison, accompanied by a drum. They played for some time in the arcade before the municipal building. The shrill music, played with great verve and noise, seemed vaguely familiar and finally became recognizable as the "Beer Barrel Polka." It remained the favorite and almost only piece played by the *chirimía* band throughout the fiesta.

527 [443] [323] Sunday the market was in full operation, and the plaza and adjoining streets were jammed with people (pl. 4, lower right). Not only were most of the residents of Cherán on the streets, in some cases making extensive purchases (this is the only time of the year that pottery is sold in Cherán, for example), but there were hundreds of visitors. The bands played early in the morning. The young men were busy working on the bull ring.

[796] The High Mass was celebrated about 10 o'clock, with the church filled to overflowing.

527 535 About 12 o'clock the first moro appeared on horseback, followed in a short time by the other two. They rode slowly around the plaza, followed by one of the bands. After a short time the moros went to lunch without dancing.

[574] Many people invited guests home to eat with them at this time, often issuing invitations well in advance. To a lesser extent, guests may be invited on other days of the fiesta. About 3 o'clock the moros returned and sat on their horses in the plaza in front of the church while the bands played. The moros then went to the *municipio*, dismounted, and danced in front of the building. Remounting, they returned to the church and danced in front of the church. Many people were openly critical of them for not dancing first in front of the church. After the performance in front of the church, the dancers went on foot down the main street, dancing in front of various stores until about 6 o'clock, when they went to eat again. During

[542] the afternoon a basketball game was played between Cherán and Paracho. It aroused little interest.

527 389 In the evening the big *castillo* or fireworks set was to be burned. Not until after dark

527 were attempts made to raise the structure, various volunteers working under the direction
● 389 of the fireworks maker. The commissioners for the fireworks had kept their promise to bring in a 20-meter pole, and great difficulties were encountered in trying to raise it. The climax of several abortive efforts came when the pole snapped about halfway up. By some miracle no one was hurt, although it appeared to fall in a dense crowd.

The collapse of the pole cast a damper on the whole fiesta, for the burning of the *castillo* is one of the high points of any Mexican fiesta. Some violence was threatened the fireworks maker, so he was promptly arrested by the authorities, partly to protect him from the crowd. He pointed out that he was not responsible for furnishing the pole and that the commissioners had brought a pine pole instead of a fir pole of similar size. The fireworks maker also argued that there was a smaller *castillo*, planned for the following night as a surprise; if he were arrested, he would be unable to put the finishing touches on that *castillo* and there would be no fireworks at all. Finally, he promised he would salvage a large part of the damaged *castillo* and the following night it would be possible to have two *castillos*. When the crowd quieted down, the fireworks maker was released and succeeded in carrying out his promises.

The threats of the crowd were not idle, by
[686] any means. The fireworks maker is always held responsible for any failures and cases are known where the maker has been badly mauled. In any case he is usually jailed and often heavily fined. In the present instance the municipal officers were all reasonable men, and no drastic measures were taken. The fireworks maker did not, however, receive the full price.

Monday morning the market continued. The
527 first band appeared and began to play about
533 11 o'clock. The second band appeared with the moros about an hour later. The moros dismounted in front of the church and went into the priest's residence, dancing before him. Then they went down the street dancing before the stores again, finally stopping for dinner.
[541] About 2 o'clock it was rumored that the bulls were about to be brought in. Actually, they were being held in a meadow in the *barranca* below

1: Beals E-5 (1940-1941) 1946

NU34 Tarasco NU34
Sierra Tarascans

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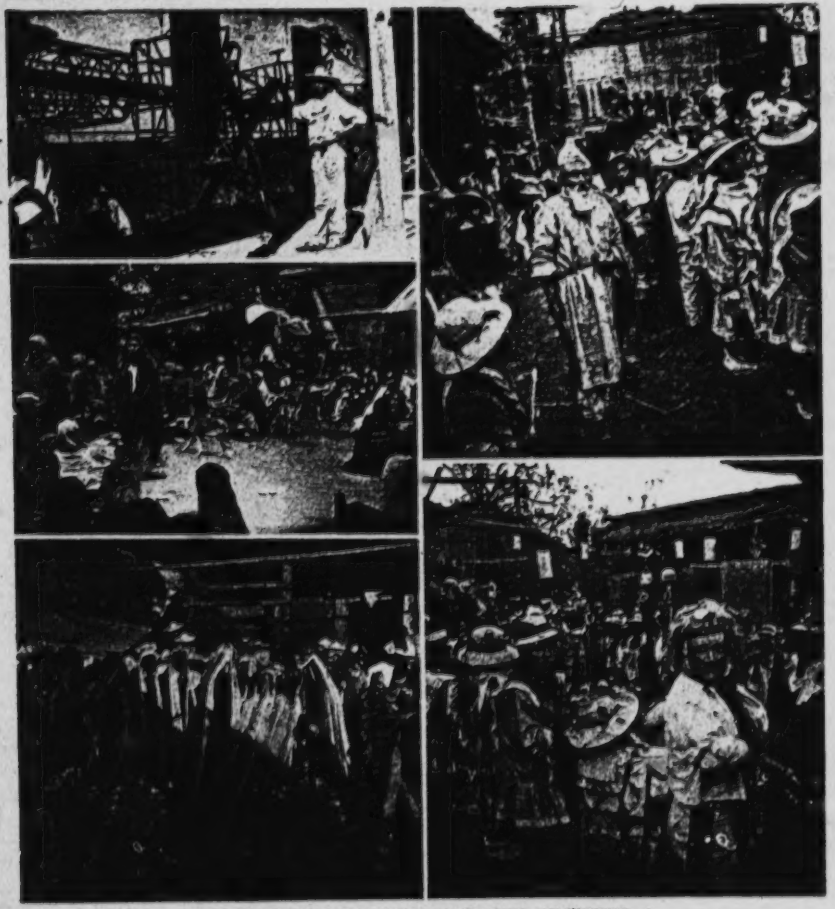

CASTILLO, PASTORELA, NEGRITO DANCERS, AND WEDDING.

Upper (left): Portion of the fireworks set (*castillo*) nearly completed. The fireworks maker is on the right. *Upper (right):* *Pastorela* at Capacuaro; at left is one of the "hermits." *Left (middle):* Large wedding in the patio in front of the house. The kitchen is at left, the temporary cooking shed in the center. The woman at left bears a cloth-covered dish with an offering for one of the godmothers. *Lower (left):* *Negrito* dancers performing at private house. The ribbons hang down to their heels. The "pin cushions" (foreground) are the dancers' head decorations. *Lower (right):* *Pastorela* at Capacuaro, with "*Europeo*" in foreground.

[End Plate 6]

245 orchard. In such cases trees are closely spaced
438 and present an unkept appearance.

Many Tarascan pueblos in the lower and warmer areas bordering the Sierra specialize in subtropical fruits, and possibly served prehistorically as fruit supply centers for the Sierra towns. Since the development of modern transportation their produce is taken to many parts of Mexico. San Angel Zurumucapio is the avocado center of the Tarascan *tierra templada*,[98] Tingambato the chirimoya town, and the former Tarascan pueblos, Ziricuritiro and Acahuato, produce bananas, mangoes, mamey, citrus, etc. Tarascan Atapan and mestizo Tingüindín supply the western part of the Sierra with citrus, guayaba, and mangoes. As early as 1581 Atapan had become a citrus-growing center, and probably before the Conquest had produced avocados and chirimoyas for Sierra trade. The La Cañada towns have ever been the northern Tarascan fruit center. Today avocados form the main fruit speciality of Acachuén, Ichán-Tacuro, and Carapan; oranges are the chief export of Tanaquillo.[99] With the possible exception of Ihuatzio, which produces large quantities of avocado, there is no specialized fruit town in the Lake area, although the aggregate subtropical fruit production there is of importance in Sierra trade.

262 Fruits from the *tierra caliente* have long had a special significance among the Sierra Tarascans. Today at least two tropical fruits are eaten especially at religious fiestas, and special effort is made to obtain them for such occasions. Coconuts (kóko) in some Sierra pueblos are rarely eaten except during the Ramos and Easter holidays.
[439] Formerly in Charapan 2 weeks before Easter a group composed of 15 men and boys from each barrio traveled down to the Tepalcatepec Basin to fetch coconuts for eating and coconut blossoms for church decorations. The band was ceremo-
[389] niously seen off with the firing of rockets.[100] Likewise, the large plantain (*plátano macho*) is eaten

[98] The large avocado trees in the house lots of Zurumucapio completely hide the town. Two types of the fruit are grown, the black and white-skin varieties. Both are irrigated, and the fruit is harvested in April and May. Frequently coffee plants are grown under the shade of the avocado.

[99] Other fruits produced in La Cañada: Limas, guayaba, chirimoyas, figs, apricots, junquiniquiles (durán), plums, mangoes, pomegranates, peaches, apples, zapote blanco, capulín, a few bananas.

[100] This custom has practically disappeared in the Sierra. Most coconuts and other tropical fruit are now obtained at the Ramos (Palm Sunday) fairs at Puríbán, Zamora, Uruapan, and Pátzcuaro. In the Lake area during Easter festivities churches are often decorated with maicas (*sendas*) from the Balsas.